REMARKS

Reconsideration and allowance are requested.

The claims are amended in response to the claim rejections under 35 U.S.C. 112, first paragraph and second paragraph. Example support is found at page 1, line 33; page 2, line 23; page 5, lines 5-6, 21-25; page 6, lines 14-16; page 10, lines 19-22; page 13, lines 9-11; page 20, lines 19-23; page 24, lines 24-32; and page 41, lines 26-27. No new matter is believed to have been added.

Withdrawal of the rejections under 35 U.S.C. §112 is requested.

Claim 1 stands rejected for anticipation based on Lan. This rejection is respectfully traversed.

Lan discloses a resource allocation method (Abstract, paragraph 21) in a communication system (Fig. 7) having resources (timeslots). But Lan does not disclose the division of the resources into multiple different resource classes based on the associated characteristic allocation time. In contrast, the only differentiation of resources conducted according to Lan is dividing resources into multiple different resource classes based on a ratio between carrier power and propagation loss.

In the Office Action, the Examiner refers to paragraphs 90-93, 203 and 223-233 as disclosing this missing feature. But these paragraphs do not disclose division of resources based on allocation time. Rather, these paragraphs disclose that the mobile stations among which the resources are to the allocated can be of different services classes, e.g., prioritized user (class 1) and non-prioritized user (class 2) (see paragraphs 91, 92, 203, 223, 224, 227). Thus, if new resources are available, they are first assigned to the prioritized users until all such prioritized users have reached their QoS quota (Fig. 24, S151, S152). If there are any remaining resources,

they are distributed among the less prioritized users (Fig. 24, S151, S152). Correspondingly, if the number of available resources decreases, resources are first deleted for the less prioritized users to thereby try to provide the QoS of the prioritized users for as long as possible (paragraphs 243, 251; Fig. 25).

But this allocation of resources in Lan has nothing to do with dividing resources into different resources classes. A resource according to Lan is not classified as a class 1 resource or a class 2 resource because there is no difference between the resources assigned to class 1 users and the class 2 users – the resources in both cases are both timeslots. It is not possible to perform any division of these resources into different resource classes based on their associated characteristic allocation time. In other words, all resources disclosed in Lan have the same associated characteristic allocation time.

Although Lan discloses division of resources into different resource classes based on the ratio of carrier power and power loss and the allocation of resources based on assigned QoS classes to the users, Lan does not disclose division of resources into multiple different resource classes based on associated characteristic allocation time. Nor does Lan disclose that different resource classes have respective utilization measures and that the decision of whether to not to trigger resource allocation is made individually for each resource class.

Lacking features recited in the claim, Lan fails to anticipate claim 1.

Many of the claims stand rejected for anticipation based on Jurkevich. This rejection is respectfully traversed.

Jurkevich discloses a resource allocation method in a communications system (Figs. 1, 4; column 4, lines 63-68; column 10, lines 37-41) having resources (column 4, lines 48-54; column 14, lines 30-32). But Jurkevich does not disclose that the resources are divided into multiple

resource classes based on their respective associated characteristic allocation times. For example, traffic component types, i.e., voice vs. data, may be used to divide the resource among the resource classes.

The Examiner refers to column 21, line 35 to column 22, line 64 as allegedly disclosing the feature of division of resources based on characteristic allocation time. However, these sections of Jurkevich merely disclose different parameters that are assigned to the traffic component types to achieve local QoS management in the communication system. There is no disclosure in this text or elsewhere in Jurkevich that resources have different characteristic allocation times and that the allocation times are used as a classifying parameter to divide the resources into different resource classes. Nor does Jurkevich disclose adopting some other classifying parameter than the disclosed traffic component type.

Similar features are missing from claims 16 and 30. Consequently, claims 1, 16 and 30 are not anticipated by Jurkevich.

Claims 38-42, 45, 47-52, and 54 stand rejected for obviousness based on Jurkevich in view of Profumo. This rejection is respectfully traversed.

Regarding claim 38, Jurkevich discloses a resource allocation method in a communications system (Figs. 1, 4; column 4, lines 63-68; column 10, lines 37-41). But Jurkevich does not disclose that the first and second resource class have different characteristic allocation times nor that the allocation time of the first resource class is shorter than the allocation time of the second resource class, as discussed above in connection with claim 1. In contrast, Jurkevich discloses resource classes of different traffic component types and having different QoS related parameters but those resource classes do not have different allocation times.

Jurkevich also does not disclose that the temporary allocation of the first resource amount of the first resource class is conducted during a progression of the resource allocation for the second class. Rather, the allocation in Jurkevich is conducted when one of the communication resources exceeds its minimum guaranteed bandwidth but another bandwidth-requesting communication resource is currently assigned less than its guaranteed bandwidth (see column 26, lines 33-38; column 28, lines 46-52). The bandwidth is taken from the communication resources in priority order (see column 25, lines 60-65; column 29, lines 17-19, 60-65).

As admitted, Jurkevich also does not disclose that the temporarily allocated first resource amount is smaller than the guaranteed minimum resource amount. The Examiner relies on Profumo for this feature.

Profumo relates to bandwidth assignment in an ATM transmission system (Abstract) and discloses a mechanism for dynamically allocation that guarantees that a mobile station always has the possibility to be assigned a minimum guaranteed bandwidth (column 2, lines 46-49). Part of this minimum guaranteed bandwidth can be momentarily freed if the mobile station has no need for the bandwidth (column 2, lines 50-53; column 2, line 66 to column 3, line 3).

Even assuming for argument's sake, that the disclosure of Profumo may be applied to the resource allocation method of Jurkevich to temporarily assign unused resources from one resource class to another resource class, a combination of Jurkevich and Profumo still fails to disclose or suggest (1) using resource classes with different characteristic allocation times, (2) triggering the resource allocation of the resource class with slower allocation time, and (3) then temporarily allocating resources from the resource class with faster allocation time during progression of the slower resource allocation.

In fact, combining the teachings presented by Jurkevich and Profumo would lead the skilled artisan to use resource classes of different traffic component types and trigger allocation of one of the resource classes at the expense of another when one of the resource classes is assigned less than a minimum guaranteed resource amount. In this proposed combination, there is no coordination between triggering resource allocation for the different resource classes as defined by claim 38.

A similar analysis applies to the resource allocation system of claim 47. For the reasons explained above, claims 38 and 47 are not rendered obvious over the combination of Jurkevich and Profumo.

The rejections should be withdrawn and the application allowed.

Respectfully submitted,

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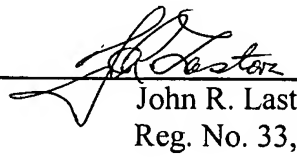
By: 
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